



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2012-0934; Directorate Identifier 2011-NM-260-AD; Amendment 39-17293; AD 2012-25-12]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for all Airbus Model A330-200 and -300 series airplanes. This AD was prompted by a report of a prematurely fractured main landing gear (MLG) bogie beam. This AD requires replacing certain MLG bogie beams before reaching new reduced life limits. We are issuing this AD to prevent fracture of the MLG bogie beam, which, under high speed, could ultimately result in the airplane departing the runway, the bogie beam detaching from the airplane, or collapse of the MLG; and consequent structural damage to the airplane and injury to the occupants.

**DATES:** This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may examine the AD docket on the Internet at

<http://www.regulations.gov> or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1138; fax (425) 227-1149.

**SUPPLEMENTARY INFORMATION:**

**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on September 12, 2012 (77 FR 56172). That NPRM proposed to correct an unsafe condition for the specified products. The Mandatory Continuing Airworthiness Information (MCAI) states:

During ground load test cycles on an A340-600 aeroplane, the MLG bogie beam has prematurely fractured.

The results of the investigation identified that this premature fracture was due to high tensile standing stress, resulting from dry fit axle assembly method. Improvement has been introduced subsequently with a grease fit axle assembly method.

Fatigue and damage tolerance analyses were performed, whose results demonstrated that the current life limit of certain MLG bogie beams with dry fit axles installed on A330 aeroplanes only must be reduced compared to the life limit stated in the A330 Airworthiness Limitations Section (ALS) Part 1-Safe Life Airworthiness Limitation Items revision 05 approved by EASA [European Aviation Safety Agency] on 29 July 2010.

Failure to comply with the reduced life limit of the MLG bogie beam with dry fit axle might jeopardize the MLG structural integrity.

For the reasons described above, this [EASA] AD requires the replacement of the affected MLG bogie beams before reaching the new reduced life limit.

The unsafe condition is a possible fracture of the MLG bogie beam, which, under high speed, could ultimately result in the airplane departing the runway, the bogie beam detaching from the airplane, or collapse of the MLG; and consequent structural damage to the airplane and injury to the occupants. You may obtain further information by examining the MCAI in the AD docket.

### **Comments**

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (77 FR 56172, September 12, 2012) or on the determination of the cost to the public.

### **Conclusion**

We reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 56172, September 12, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 56172, September 12, 2012).

### **Costs of Compliance**

We estimate that this AD will affect 53 products of U.S. registry. We also estimate that it will take about 16 work-hours per MLG bogie beam (2 MLG bogie beams per airplane) to comply with the basic requirements of this AD. The average labor rate is

\$85 per work-hour. Required parts will cost about \$255,000 per MLG bogie beam.

Where the service information lists required parts costs that are covered under warranty, we have assumed that there will be no charge for these parts. As we do not control warranty coverage for affected parties, some parties may incur costs higher than estimated here. Based on these figures, we estimate the cost of this AD to the U.S. operators to be up to \$27,174,160, or \$256,360 per MLG bogie beam.

### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on

the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM (77 FR 56172, September 12, 2012), the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new AD:

2012-25-12 **Airbus:** Amendment 39-17293. Docket No. FAA-2012-0934; Directorate Identifier 2011-NM-260-AD.

#### **(a) Effective Date**

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to all Airbus Model A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes, certificated in any category, all manufacturer serial numbers (S/Ns).

#### **(d) Subject**

Air Transport Association (ATA) of America Code 32, Landing gear.

#### **(e) Reason**

This AD was prompted by a report of a prematurely fractured main landing gear (MLG) bogie beam. We are issuing this AD to prevent fracture of the MLG bogie beam,

which, under high speed, could ultimately result in the airplane departing the runway, the bogie beam detaching from the airplane, or collapse of the MLG; and consequent structural damage to the airplane and injury to the occupants.

**(f) Compliance**

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

**(g) Bogie Beam Replacement**

At the later of the times specified in paragraph (g)(1) or (g)(2) of this AD, replace all MLG bogie beams having part number (P/N) 201485300, 201485301, 201272302, 201272304, 201272306, or 201272307, except those that have S/N S2A, S2B, or S2C, as identified in Messier-Dowty Service Letter A33-34 A20, Revision 5, including Appendices A through F, dated July 31, 2009, with a new or serviceable part, in accordance with a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, or European Aviation Safety Agency (EASA) (or its delegated agent).

(1) Before the accumulation of the flight hours or landings, whichever occurs first, specified in table 1 to paragraph (g)(1) of this AD, as applicable to airplane type, model, and weight variant (WV).

**Table 1 to Paragraph (g)(1) of this AD – *MLG Bogie Beam Life Limit***

| <b>Affected airplanes –</b>  | <b>Life limit from first installation of MLG bogie beam on an airplane –</b> |
|--|--|
| Model A330-201, -202, -203, -223, -243, weight variant (WV)02x, WV05x (except WV058), and WV06x series | 50,000 landings or 72,300 total flight hours                                 |
| Model A330-201, -202, -203, -223, -243 WV058   | 50,000 landings or 57,900 total flight hours                                 |
| Model A330-301, -302, -303, -321, -322, -323, -341, -342, -343 WV00x, WV01x, WV02x, and WV05x series   | 46,000 landings or 75,000 total flight hours                                 |

(2) Within 6 months after the effective date of this AD.

**(h) Parts Installation Limitation**

As of the effective date of this AD, a MLG bogie beam having any part number identified in paragraph (g) of this AD, may be installed on an airplane, provided its life has not exceeded the life limit defined in table 1 to paragraph (g)(1) of this AD, and is replaced with a new or serviceable part before reaching the life limit defined in table 1 to paragraph (g)(1) of this AD.

**(i) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) **Alternative Methods of Compliance (AMOCs):** The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the



International Branch, send it to ATTN: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1138; fax (425) 227-1149. Information may be e-mailed to: [9-ANM-116-AMOC-REQUESTS@faa.gov](mailto:9-ANM-116-AMOC-REQUESTS@faa.gov). Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) **Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

**(j) Related Information**

Refer to MCAI EASA Airworthiness Directive 2011-0212, dated October 31, 2011; and Messier-Dowty Service Letter A33-34 A20, Revision 5, including Appendices A through F, dated July 31, 2009; for related information.

**(k) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Messier-Dowty Service Letter A33-34 A20, Revision 5, including Appendices A through F, dated July 31, 2009.

(ii) Reserved.

(3) For service information identified in this AD, contact Messier-Dowty: Messier Services Americas, Customer Support Center, 45360 Severn Way, Sterling, VA 20166-8910; telephone 703-450-8233; fax 703-404-1621; Internet <https://techpubs.services/messier-dowty.com>.

(4) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on December 5, 2012.

Kalene C. Yanamura,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2012-30370 Filed 12/21/2012 at 8:45 am; Publication Date: 12/26/2012]